

A NEW PREHISTORIC SETTLEMENT NEAR KÜÇÜKÇEKMECE LAKE IN ISTANBUL: AVCILAR- FIRUZKOY

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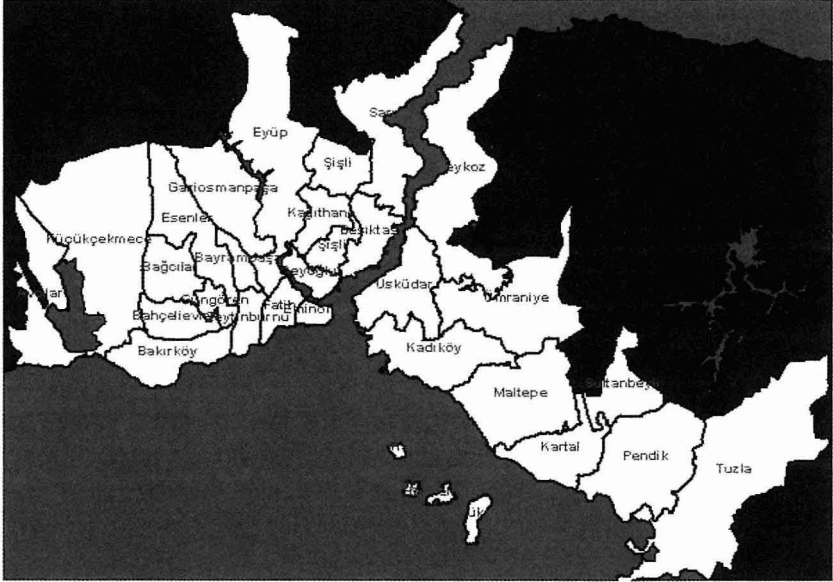
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ABSTRACT: Küçükçekmece lake is situated 20 km west of Bosphorus, İstanbul. At the north there are small rivers feeding the lake. The two most important ones are Sazlıdere and Eskinoz. The banks of these rivers near the lake had to be the most probable settlement places. The West Bank of Küçükçekmece lake remains within the boundaries of town of Avcılar. Our investigations brought us very important findings potteries and stone tools for the scientific world. These are similar Neolithic potteries unseen yet in anywhere near Küçükçekmece. They were poorly fired, hand made from black mud containing different minerals. The lack of straw in their texture made us think that these pieces may belong to a time before even agriculture started.

KEY WORDS: İstanbul, Prehistory, Avcılar- Firuzkoy, Neolithic, Yarımburgaz

In the chairmanship of Ass Prof. Dr. Şengül Aydingün from Kocaeli University after getting the permission from Ministry of Culture and Tourism in 2007, a scientific team began a survey to gather more information about the prehistoric periods of İstanbul / Turkey

The team began its survey near the lake of Küçükçekmece. (Pic 1a-b) One of the two main reasons in choosing that site was that the area was geographically very favorable for all kind of human settlements and a couple of kilometers north there is the cave of Yarımburgaz, known for its human settlements'



PICTURE 1: Localization of Küçükçekmece Lake in Istanbul (From Google Earth Program)

records for many hundred thousands of year. The aim was to find further early human evidences. Not known till today there must surely be other prehistoric settlements waiting for discovery.

Küçükçekmece lake is situated 20 km west of Bosphorus. It covers an area of 15.2 km². Its length at the North-South direction is 7,8 km and widest distance in east-west direction is 4,5 km. The lake is rather shallow with depths changing from 5 m to 20 m. The deepest part is at its south boundary. Until the historic times the lake was a bay. The sand filling the mouth it became a lagoon. Despite this and other geological changes its shores offered perfect conditions for human settlements.

During the geological times when Marmara sea was land locked and the sea level much lower then today, in the place of Küçükçekmece lake there were deep river valleys. When the last glacial period ended the increasing sea level all around the globe forced itself through Dardanelles and Bosporus. The waters filled Marmara and the actual sea level increased by 90-120 meters. Previous deep valleys became rias or drown estuaries.

A sand bridge separates Küçükçekmece Lake from the Sea of Marmara. In the eastern end of this bridge a small opening still exists. With a depth of only 1,5 m, this water channel allows the navigation of the smallest vessels but also cause the mixing of the fresh water with the salty one of the sea. Thus a bitter taste of the lake's water. At the north there are small rivers feeding the lake. The two most important ones are Sazlidere and Eskinoz. The shores of these rivers near the lake had to be the most probable settlement places.

Naturally the places where rivers meet lakes or seas are ideal places for sea born animals. These fishes and mussels were offering valuable food for early settlers for their high nutritious values and their easy availability. In such places early humans had access both to fresh water of the rivers and the relative ease of the sea transportation. Humans surely discovered and used such favorable conditions of Küçükçekmece lake many hundred thousands years ago. In many different parts of the lake human settlements and small ports must have been constructed.

Yarimbürgaz Cave and the Surroundings

Yarimbürgaz cave is situated 2,5 km North of point where Sazlidere river meets the lake. Earliest human evidence of Turkey and Europe was discovered in it. (Pic.2a-b)

The earliest human traces are dated to the 600,000 to 400,000 years ago. The cave came into existence around 1 Million year ago in Middle Pleistocene. Yarimbürgaz Cave is important not only for archaeology but for also geology,



PICTURE 2: a-b Yarimburgaz Cave



geochronology and geoarchaeology. Its sediments contain important information since the Quaternary about changing climate, environ, biology, changing sea levels and human existence. The cave is like a geoarchaeology guide.

Previous excavations were rather cultural oriented and aimed at discovering the human history. They never went till the main rock. Yet they proved its geological importance. Human bones were not discovered but the findings were in majority about the tools early humans of Lower Paleolithic Period were using. These tools were found cemented inside the bresh levels of Middle Pleistocene. They were known as Olduwai type, and originating from the pebbles of the rivers. One of the most important aspects of these tools is that they are the first meat cleaver and cutting tools from this period found in their real levels. Placed on a natural land bridge between Asia, Africa and Europe and in the middle of the passage ways between these continents Yarimbürgaz Cave has an excellent strategic position.

Evidence of human existence in the cave is dated to Early Paleolithic Period (600,000 – 150,000 B.C.). The next recorded phase belongs to the Neolithic Period (6300 – 4300 BC). This is the time were first agricultural activities begun. During this second phase the cave must to be used as a cult place.

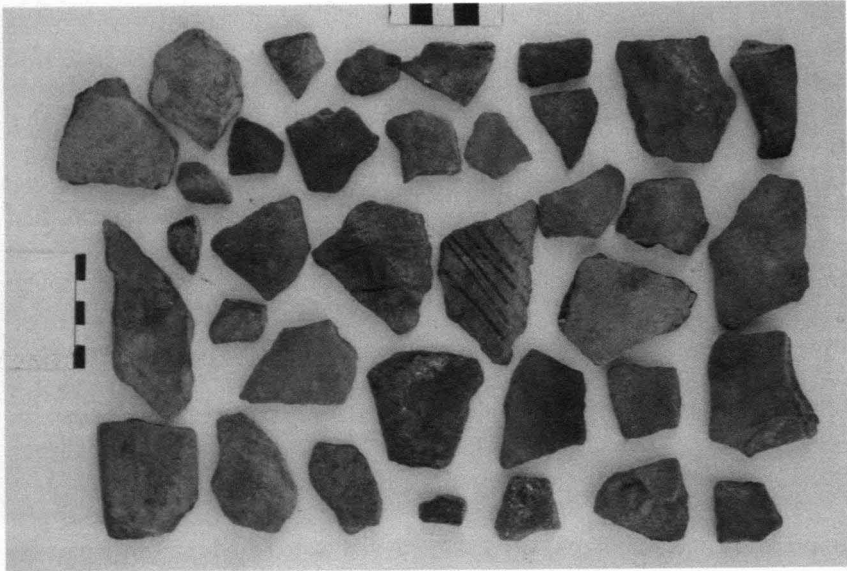
The existence of such an important place so near to such favorable geographical area as Küçükçekmece Lake oriented us to search for other possible Neolithic settlements around its shores. In the past other surveys also looked for Neolithic-Chalcolithic villages without finding any evidence. Our survey was arguably the most extensive one ever carried on this region and the local authorities' help, such as Avcılar Municipality's (Some of the area is under its responsibility) important logistic and scientific support made a big difference. A group of students, scientists and many visiting experts spent a total of two month during the period of July-August 2007 all joined the survey.

The Neolithic Settlement Discovered Around Küçükçekmece Lake in Avcılar - Firuzkoy

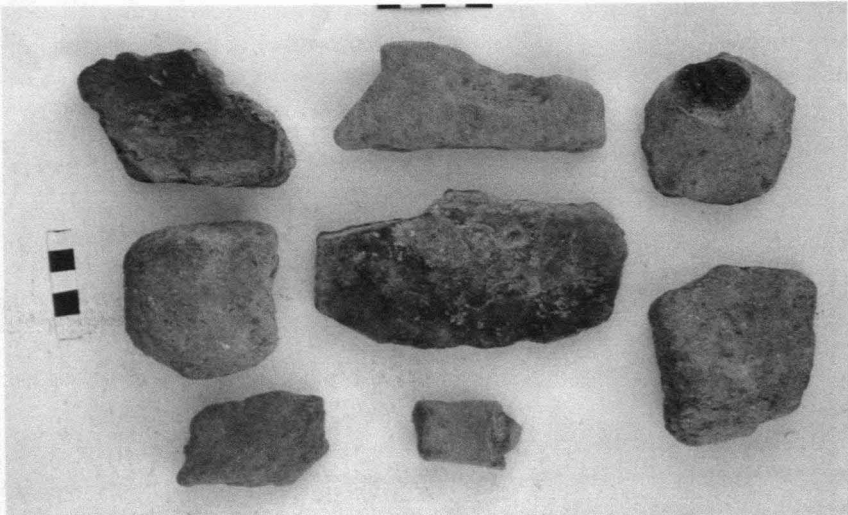
The West Bank of Küçükçekmece Lake remains within the boundaries of town of Avcılar. Our investigations brought us very important findings for the scientific world.

In Avcılar's Firuzkoy district, 100 meters up from where Eskinoz River meets the lake local villagers in order to irrigate their vegetable garden dig two water wells. The earths rejected around were containing potteries unseen yet in anywhere near Küçükçekmece. They were hand made from black mud containing different minerals and poorly fired. The lack of straw in their texture made us think that these pieces may belong to a time before even agriculture started (Pic.3a-b)

On these pottery samples TS and OLS analyses were being carried out. Soon



PICTURE 3: a-b Neolithic Potteries



we will get much precise dating. Further analyses of the walls of the wells showed that they were coming from a cultural level at the depth of 3 – 3,5 meters.

In the first irrigation well these discoveries were made, according to the Geologist Prof. Dr Sukru Ersoy and Ass Prof Dr Timur Ustaomer's researches just

above the water level, the existence of ostrea shows the effects of the sea. Our observations showed us that just above the ostrea, from a mud layer with sands our potteries are coming. Above them there is a layer with pebbles from rivers sediments. For origins, these pebbles are in general from chert, flint, agate, chalcedon. They are rounded pebbles from silica gels. Also some rounded volcanic pebbles too were found. Some of them were milk like pale colored quartz pebbles. According to these findings this point coincides with the Eskinoz River ancient bed and a turning point in the ancient course. It seems that the river shifted its course by at least 15-20 meters. It is understood that the sea once filled the river valley and later retreated back to leave it to the river.

The upper most layer of 1,5 meters is rather mixed and originates from land slide(s). There, Hellenistic, Roman and Byzantine amphora, marble columns and glaze parts were found.

The second irrigation well is approximately 80 meters at the north of the first one. It is much wider than the first and in it the same layers, are more clearly observed.

The lowest layer of the second well is formed by a 2-2,5 meters rough sand, in some places small pebbles and sometime with sea fossils(?) grey and yellow colored stratum. The layer above is formed by a 50-60 cm, grey colored sandy clay material. The bottom of this layer has a 20 cm wide zone of ostrea. (Pic.4a-b)



PICTURE 4: a Cultural Level in irrigate well I



PICTURE 4: *b Cultural Level in irrigate well II*

This ostrea zone is discontinuous. Above the ostrea zone it is possible to find smaller sea shells. Most probably the grey clay from this layer was used. The best proof is the abundance of the hand made, blackish, poorly burned pieces of ceramics from that layer. These ceramics are not yet precisely dated.

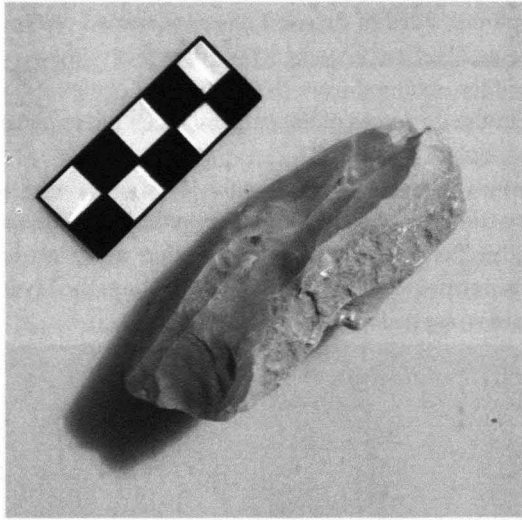
The grey color of the clay makes us think of a marshy environment.

Above there is an other 50 cm deep layer with a color of beige and light brown, sandy clay stones. There are small sea shells in that level too. The upper most layer is about 1,25 cm agricultural soils. In its bottom side there is yellow colored clay which contains human artifacts.

Some of the flint stone tools recovered from these two diggings are categorized by Prof. Dr. Mehmet Ozdogan to the Upper Paleolithic (15.000 – 9.000 BC) and he stated that these are the first finds ever from that period in the area. (Pic.5a-b)

As a part of our survey Mr. Caglar Yalciner carried out a series of Archaeogeophisic GPR researches in Küçükçekmece Lake's basin. And the data he recovered proves that with a high probability there is a prehistoric settlement in a wide area including the two water wells. This finding is very important to prove the missing settlement nearby Yarimburgaz Cave which was searched for such a long time.

PICTURE 5: a-b Upper Paleolithic stone tools



A close inspection of the GPR data gives the picture of an ancient village in Küçükçekmece Lake West Bank, in the part called Firuzkoy. The site is the result of the silt coming from Eskinoz River filling the lake. The village must have been

filled with landslides. When one goes from the two water wells dig towards the west, thus going up to the slope. In all the GPR profiles a cultural layer of 50 cm thickness is apparent. Further detailed research carried out in an area of 300 x 100 meters gave us a distinct zone of 300 x 70 meters with such a layer.

The GPR profiles obtained from that area were compared and according to the differences in the thickness of the cultural layer, likely places for prehistoric settlements were noted.

As a result of all these measurements the layer containing organic materials and clay was concluded as the cultural layer. In the Küçükçekmece Lake's basin since the Neolithic Period the major construction materials being woods and plants stem, it is normal to think that in places where the layer is thicker some buildings' remains may be found.(Pic. 6)



PICTURE 6: a-b Arkeo GPR in Avcılar-Firuzkoy

The place where we recovered the pottery was slightly different many thousands year ago. It was a river mouth flowing into a lake, and was a small bay. Thus it was a place very favorable for settlement.

The opposite bank of the river is on a peninsula which came into existence later. In the west side of this peninsula many stone tools were recovered. These weights and these grinding and cutting tools were similar to those coming from the Early Paleolithic Period of Yarımburgaz Cave. These findings show us that the dwellers of Yarımburgaz were visiting lake's shore for hunting. And for that specific spot, which is only six km from the cave, there are ample materials to prove their existence in the far distant past. Here they might have hunt, skin the animals, treat the skin, working and sharpening their bone tools, in short, this area may be big workshop. A claim which we will try to answer in coming years, as our survey proceeds.

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